Objective: To study role of tirofiban in postinfarction angina who refused for early intervention.
Methodology: (1) Single centre prospective trial. (2) Duration of study – December 2013 to June2015. (3) Total of 212 patients of postinfarction angina who refused to undergo early intervention after thrombolysis included in this study. (4) Follow up for 30 days. (5) They are assigned in 1:1 manner to receive either tirofiban intravenously 25 μg/kg over 3 min and then 0.15 μg/kg/min (or 0.075 μg/kg/min for patients with serum creatinine >1.5 mg%), for up to 18 h along with intensification of antianginal therapy (group A – 106 patients) OR intensified antianginal therapy alone (group B – 106 patients). (6) Patients were well matched according to baseline characteristics.
Inclusion criteria: (1) Written informed consent. (2) Patients with STEMI (anterior and inferior both) presenting in emergency within 12 h of chest pain thrombolysed exclusively with Streptokinase (stk+) who had recurrent episodes of angina within 48 h of admission.
Exclusion criteria: (1) Hypersensitivity, history of thrombocytopenia with tirofiban. (2) Active/history of internal bleeding (within last 30 days), intracranial hemorrhage, or neoplasm. (3) History of stroke within last 30 days or any history of hemorrhagic stroke. (4) AV malformation or aneurysm, aortic dissection, severe HTN, acute pericarditis. (5) Current use of another parenteral glycoprotein IIb/IIIa inhibitor. (6) Patient age <18 yrs and >75 yrs.
Primary endpoints: Composite of all cause mortality and nonfatal myocardial infarction at 30 days.
Secondary endpoints: (1) Recurrent episodes of angina. (2) Total time to reach pain free status.
Results: Primary composite endpoints did not differ between 2 groups – 20 patients (18.86%) versus 21 patients (19.81%) reached primary endpoints in group A and group B with *p* value of 0.26, odds ratio (OR) 0.82. Recurrent angina was lower in group A – 10 patients (9.43%) versus 21 patients (19.81%) with *p* value of 0.003. Total time to reach pain free status was lower in group A when compared to group B with *p* value of 0.05 mean time of 18 hrs and 30 min in group A as compared to 43 hrs and 18 min in group B. Minor bleeding were higher with tirofiban (16.98% in group A versus 7.54% in group B) with *p* value 0.003 according to GUSTO bleeding classification. However more serious bleed did not differ between two groups.
Conclusion: (1) Patients with postinfarction angina, unwilling for intervention, had reduced incidence of recurrent angina and earlier relief of anginal symptoms, when tirofiban added to intensified antianginal therapy. (2) This is achieved without causing significant difference in primary composite endpoint. (3) Although significant increase in minor bleed is noted, incidence of major bleed did not differ between two groups.

Triple versus dual antiplatelet therapy in patients with acute coronary syndrome undergoing percutaneous coronary intervention (PCI) – Our hospital experience

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Background: (1) Following percutaneous coronary intervention (PCI), clopidogrel therapy in addition to aspirin leads to greater protection from thrombotic complications than aspirin alone. Whether triple antiplatelet therapy with addition of cilostazol is superior or similar to dual antiplatelet therapy in patients with acute coronary syndrome undergoing PCI in the era of drug-eluting stents remains unclear. (2) It inhibits platelet aggregation and is a direct arterial vasodilator. Its main effects are dilation of the arteries supplying blood to the legs and decreasing platelet coagulation. (3) Because of its different mechanism of action cilostazol may have add on antiplatelet effect in patients undergoing PCI.
Objectives: To evaluate the effect of triple antiplatelet versus dual antiplatelet therapy in patients with acute coronary syndrome after PCI.
Inclusion criteria: Patients 18 years and above acute coronary syndrome STEMI (AWMI & IWMI both) presented in emergency within 12 h of chest pain.
Exclusion criteria: Contraindication to aspirin, clopidogrel, cilostazol, left main disease, graft vessel disease, LVEF <30%.
Methods: We collected consecutive 280 acute coronary syndrome patients between December 2013 and June 2015 undergoing drug-eluting stents implantation in our hospital. They received either dual (aspirin plus clopidogrel; dual group; $n = 140$) or triple (aspirin plus clopidogrel plus cilostazol; triple group; $n = 140$) antiplatelet therapy. Patients were well matched according to baseline characteristics. The triple group received additional cilostazol at least for 1 month. Various major adverse cardiac events at 6 months were compared between these 2 groups.
Primary endpoints: Total deaths, cardiac deaths, and MACC.
Secondary endpoints: (1) Ischemia driven target lesion revascularisation and ischemia driven target vessel revascularisation at 6 months (2) Stent thrombosis.
Results: (1) Patients with STEMI who underwent primary PCI with a drug-eluting stent, after 6 months of treatment, the group assigned to cilostazol in addition to dual antiplatelet therapy for at least one month ($n = 35$) had reduced cardiac death (adjusted OR = 0.52; 95% CI, 0.32–0.84), *p* value – 0.04, total death (adjusted OR = 0.6; 95% CI, 0.41–0.89) *p* value – 0.02, and total major adverse cardiac events (adjusted OR = 0.74; 95% CI, 0.58–0.95). (2) Incidence of TLR & TVR did not decrease significantly with *p* values 0.52 and 0.45, respectively. (3) However, incidence of stent thrombosis reduced but results were not significant with *p* value 0.09. (4) The findings supported the safety of triple antiplatelet therapy, as the adverse effect profile of the triple antiplatelet therapy group was not significantly different from that of the dual antiplatelet therapy group (major bleedings: 2.1% in the cilostazol group vs. 2.8% in the dual therapy group). (5) Patients who benefited the most from triple therapy were women, patients aged older than 65 years, and patients with diabetes.
Conclusions: Triple antiplatelet therapy seems to be superior to dual antiplatelet therapy in patients with ACS undergoing PCI with drug-eluting stents with insignificant difference in adverse effect profile.

Cardiac arrhythmia early after ST elevation myocardial infarction

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Sudden cardiac death is the most feared outcome of ST elevation myocardial infarction (STEMI). Major cardiac arrhythmia occurring very early after STEMI are harbinger of sudden cardiac death (SCD). We conducted a study to record cardiac arrhythmia within 3 h of thrombolysis in 100 patients of STEMI by applying 24 h Holter recording. The patient admitted to ICCU were clinically examined, thrombolysed with tenecteplase or streptokinase, put on 24 h Holter monitoring and studied for major adverse coronary events (MACE) during hospital stay and up to 1 month after discharge. Mean age of study population was 56.75 ± 15.6 yrs with male (76%) predominating. One or more major cardiac risk factor was noted in 74% patients with chronic smoking detected in 79%. Door to needle time was 4.76 ± 2.5 h. 59% had anterior location while 49% had